

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): An image read-out apparatus comprising a reading light projecting means which projects reading light in a line-like pattern extending in a main scanning direction onto an image-bearing medium bearing thereon image information, an image-bearing light detecting means having a line sensor which extends along the line-like portion of the image-bearing medium exposed to the reading light to receive image-bearing light emitted from the portion exposed to the reading light and converts the amount of image-bearing light to an electric signal, and a sub-scanning means which moves one of the image-bearing light detecting means and the image-bearing medium relatively to each other in a sub-scanning direction intersecting the main scanning direction, wherein the improvement comprises that

the image-bearing light detecting means further comprises an erecting unit optical system which is disposed along the portion of the image-bearing medium exposed to the reading and focuses the image-bearing light on the line sensor and an optical element array formed by a plurality of first and second optical elements which are alternately arranged along the erecting unit optical system and lead the image-bearing light passing through the erecting unit optical system in different directions, and

said line sensor comprises a first sensor which receives light led by the first optical elements and a second sensor which receives light led by the second optical elements.

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2. (original): An image information read-out apparatus as defined in Claim 1 in which the image-bearing medium is a stimuable phosphor sheet on which radiation image information has been stored, and the image-bearing light is stimulated emission.

3. (currently amended): An image information read-out apparatus as defined in Claim [[1]] 2, in which the stimuable phosphor sheet is anisotropic and radiates the stimulated emission in a direction at a predetermined angle to the direction of thickness of the stimuable phosphor sheet, and the image-bearing light detecting system is arranged so that the stimulated emission incident face of the erecting unit optical system is positioned [[in]] perpendicular to the direction at the predetermined angle to the direction of thickness of the stimuable phosphor sheet.

4. (original): An image information read-out apparatus as defined in Claim 1 in which the image-bearing medium bears thereon a fluorescent material image.

5. (original): An image information read-out apparatus as defined in Claim 1 in which each of the first and second sensors is provided with effective areas, where the sensor can detect light, and noneffective areas, where the sensor cannot detect light, which are alternately arranged in the main scanning direction, and the part of the image-bearing light led by the first optical elements is caused to impinge upon the effective areas of the first sensor and the part of the image-bearing light led by the second optical elements is caused to impinge upon the effective areas of the second sensor.

6. (original): An image information read-out apparatus as defined in Claim 1 in which the first and second sensors are disposed so that the effective areas of the first and second sensors overlap each other in the main scanning direction at portions corresponding to boundaries

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between the first and second optical elements of the optical element array and there is provided pixel signal adder means which adds up pixel by pixel outputs of the first and second sensors for each pixel in the portions corresponding to boundaries between the first and second optical elements of the optical element array.

7. (original): An image information read-out apparatus as defined in Claim 1 in which the first optical elements of the optical element array transmits the image-bearing light and each of the second optical elements has a reflecting surface which reflects the image-bearing light.

8. (original): An image information read-out apparatus as defined in Claim 1 in which each of the first optical elements has a reflecting surface which reflects the image-bearing light in a first direction, and each of the second optical elements has a reflecting surface which reflects the image-bearing light in a second direction different from the first direction.

9. (original): An image information read-out apparatus as defined in Claim 1 in which the optical element array has a function of cutting the reading light.

10. (original): An image information read-out apparatus as defined in Claim 7 in which said reflecting surface transmits the reading light.

11. (original): An image information read-out apparatus as defined in Claim 1 provided with a plurality of sets of image-bearing light detecting means.

12. (currently amended): An image information read-out apparatus as defined in Claim 11, wherein in which the boundaries between first and second optical elements of the plurality of sets of image-bearing light detecting means are positioned in different positions, image-bearing light detecting means by image-bearing light detecting means as seen alternately arranged in the main scanning direction.